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# 1. Identification

#### Product identifier used on the label

## TWO.O

### Recommended use of the chemical and restriction on use

Recommended use\*: soil/plant amendment, Biological beneficial agent

## Details of the supplier of the safety data sheet

Company:
BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

### **Emergency telephone number**

24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300

BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Chemical family: No applicable information available.

## 2. Hazards Identification

## According to Regulation 2024 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

## Classification of the product

No need for classification according to GHS criteria for this product.

#### Label elements

The product does not require a hazard warning label in accordance with GHS criteria.

<sup>\*</sup> The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

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Micro-organisms may have the potential to provoke sensitising reactions.

#### Labeling of special preparations (GHS):

Product contains the following components and may cause an allergic skin reaction: 1,2-benzisothiazol-3(2H)-one, mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

The substance may cause sensitization of the skin in particularly sensitive individuals. Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

# 3. Composition / Information on Ingredients

#### According to Regulation 2024 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Bacillus Thurengiensis kurstaki

CAS Number: 68038-71-1 Content (W/W): >= 0.1 - < 1.0% Synonym: No data available.

**Proprietary Polyol** 

NJ TSRN 161090809-5002 Content (W/W): >= 5.0 - <= 13.0% Synonym: No data available.

5-chloro-2-methyl-2H-isothiazol-3-one

CAS Number: 26172-55-4 Content (W/W): < 0.1%

Synonym: 5-Chlor-2-methyl-4-isothiazolin-3-on

1,2-benzisothiazol-3(2H)-one

CAS Number: 2634-33-5 Content (W/W): <= 0.1% Synonym: No data available.

2-Methyl-4-Isothiazolin-3-one

CAS Number: 2682-20-4 Content (W/W): <= 0.1%

Synonym: 2-Methyl-4-isothiazolin-3-one; 2-Methyl-2H-isothiazol-3-one

The actual concentration is withheld as a trade secret.

## 4. First-Aid Measures

## **Description of first aid measures**

#### **General advice:**

Remove contaminated clothing. Show container, label and/or safety data sheet to physician.

#### If inhaled:

Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary.

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#### If on skin:

Wash thoroughly with soap and water

#### If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

#### If swallowed:

Rinse mouth and then drink 200-300 ml of water. Do not induce vomiting. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Immediate medical attention required.

## Most important symptoms and effects, both acute and delayed

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11., (Further) symptoms and / or effects are not known so far Hazards: No applicable information available.

## Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment: Symptomatic treatment (decontamination, vital functions).

## 5. Fire-Fighting Measures

## **Extinguishing media**

Suitable extinguishing media: water spray, dry powder, carbon dioxide, foam

## Special hazards arising from the substance or mixture

Hazards during fire-fighting:

carbon monoxide, carbon dioxide, Hydrogen chloride, nitrogen oxides, halogenated compounds, sulfur oxides, sodium oxides

The substances/groups of substances mentioned can be released in case of fire.

## Advice for fire-fighters

Protective equipment for fire-fighting:

Wear self-contained breathing apparatus and chemical-protective clothing.

## **Further information:**

Keep containers cool by spraying with water if exposed to fire. In case of fire and/or explosion do not breathe fumes. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

#### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

Do not breathe vapour/spray. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

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## **Environmental precautions**

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

## Methods and material for containment and cleaning up

For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).

For large amounts: Dike spillage. Pump off product.

Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

# 7. Handling and Storage

## Precautions for safe handling

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Protection against fire and explosion:

No special precautions necessary. The substance/product is non-combustible. Product is not explosive.

#### Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

Further information on storage conditions: Keep away from heat. Protect from direct sunlight.

Storage stability:

Storage temperature: > 4 - < 30 °C Storage duration: 12 Months

Protect from temperatures above: 40 °C

Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

## 8. Exposure Controls/Personal Protection

#### Components with occupational exposure limits

Proprietary Polyol OSHA Z1: PEL 15 mg/m3 Total dust ;

OSHA Z1: PEL 5 mg/m3 Respirable fraction;

## Advice on system design:

No applicable information available.

#### Personal protective equipment

#### Respiratory protection:

Respiratory protection not required.

## Hand protection:

Chemical resistant protective gloves, Protective glove selection must be based on the user's assessment of the workplace hazards.

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#### Eye protection:

Safety glasses with side-shields. Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

## **Body protection:**

Sublimation point:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

#### General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

# 9. Physical and Chemical Properties

Physical state: liquid Form: liquid Odour: earthy

Odour threshold: Not determined due to potential health hazard by inhalation.

Colour: beige to brown approx. 6 - 8 (100 %(m), 23 °C)

Melting point: approx. 0 °C

Information applies to the solvent.

Boiling point: approx. 100 °C

Information applies to the solvent.

No applicable information available.

Flash point: > 94 °C not applicable

Lower explosion limit: As a result of our experience with this

product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with

the intended use.

Upper explosion limit: As a result of our experience with this

product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with

the intended use.

Autoignition: Based on the water content the

product does not ignite.

Vapour pressure: approx. 23.4 hPa

(20°C)

Information applies to the solvent.

Density: approx. 1.034 g/cm3

(20 °C)

Relative density: No data available. Relative vapour density: No data available.

Partitioning coefficient n- not applicable for mixtures

octanol/water (log Pow):

Thermal decomposition: No decomposition if stored and handled as

prescribed/indicated.

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Viscosity, dynamic: 82 mPa.s

( 20 °C) 27 mPa.s ( 20 °C)

Viscosity, kinematic: No data available.

Solubility in water: dispersible

Solubility (quantitative):
Solubility (qualitative):
Molecular weight:
Evaporation rate:
No data available.
No data available.
not applicable

Other Information: If necessary, information on other physical and chemical

parameters is indicated in this section.

Particle characteristics

Particle size distribution: The substance / product is marketed or used in a non solid or granular

form.

## 10. Stability and Reactivity

#### Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Oxidizing properties:

Based on its structural properties the product is not classified as oxidizing.

## **Chemical stability**

The product is stable if stored and handled as prescribed/indicated.

### Possibility of hazardous reactions

No hazardous reactions if stored and handled as prescribed/indicated.

#### Conditions to avoid

See SDS section 7 - Handling and storage.

## Incompatible materials

strong acids, strong bases, strong oxidizing agents

#### Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

## 11. Toxicological information

#### Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

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## **Acute Toxicity/Effects**

#### Acute toxicity

Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation.

#### Oral

Type of value: LD50 Species: rat (female)

Value: > 5,000 mg/kg (EPA Guideline)

No mortality was observed. Limit concentration test only (LIMIT test).

#### Inhalation

Type of value: LC50 Species: rat (male/female) Value: > 5.13 mg/l (other) Exposure time: 4 h An aerosol was tested.

No mortality was observed. Limit concentration test only (LIMIT test).

#### Dermal

Type of value: LD50 Species: rat (male/female) Value: > 5,000 mg/kg (other)

No mortality was observed. Limit concentration test only (LIMIT test).

#### Assessment other acute effects

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

The product has not been tested. The statement has been derived from the properties of the individual components.

#### Irritation / corrosion

Assessment of irritating effects: Not irritating to the eyes. Not irritating to the skin.

## <u>Skin</u>

Species: rabbit Result: non-irritant Method: other

#### Eye

Species: rabbit Result: non-irritant Method: EPA Guideline

## Sensitization

Assessment of sensitization: There is no evidence of a skin-sensitizing potential.

### **Aspiration Hazard**

The product has not been tested. The statement has been derived from the properties of the individual components. No aspiration hazard expected.

### **Chronic Toxicity/Effects**

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## Repeated dose toxicity

Assessment of repeated dose toxicity: The product has not been tested. The statement has been derived from the properties of the individual components.

#### Genetic toxicity

Assessment of mutagenicity: The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

#### Carcinogenicity

Assessment of carcinogenicity: The product has not been tested. The statement has been derived from the properties of the individual components.

#### Reproductive toxicity

Assessment of reproduction toxicity: The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

### **Teratogenicity**

Assessment of teratogenicity: The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

#### Other Information

Misuse can be harmful to health.

# 12. Ecological Information

## **Toxicity**

#### Aquatic toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components.

#### Persistence and degradability

### Assessment biodegradation and elimination (H2O)

The product has not been tested. The statement has been derived from the properties of the individual components.

## Bioaccumulative potential

## Assessment bioaccumulation potential

The product has not been tested. The statement has been derived from the properties of the individual components.

### Mobility in soil

#### Assessment transport between environmental compartments

The product has not been tested. The statement has been derived from the properties of the individual components.

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## **Additional information**

Other ecotoxicological advice:

Do not discharge product into the environment without control.

## 13. Disposal considerations

#### Waste disposal of substance:

Wastes resulting from this product may be disposed of on site or at an approved waste disposal facility.

#### Container disposal:

Do not reuse containers without commercial reconditioning. Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned. All other containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

# 14. Transport Information

## Land transport

**USDOT** 

Not classified as a dangerous good under transport regulations

### Sea transport

**IMDG** 

Hazard class: 9

ID number: UN 3245

Hazard label: 9
Marine pollutant: NO

Proper shipping name: GENETICALLY MODIFIED MICRO-ORGANISMS

## Air transport

IATA/ICAO

Hazard class:

ID number: UN 3245

Hazard label: 9

Proper shipping name: GENETICALLY MODIFIED MICRO-ORGANISMS

## 15. Regulatory Information

### **Federal Regulations**

#### Registration status:

Fertilizer TSCA, US released / listed

Chemical TSCA, US released / listed

**EPCRA 311/312 (Hazard categories):** Refer to SDS section 2 for GHS hazard classes applicable for this product.

#### State regulations

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State RTKCAS NumberChemical nameNJTrade SecretProprietary PolyolPATrade SecretProprietary Polyol

### 16. Other Information

## SDS Prepared by:

BASF NA Product Regulations SDS Prepared on: 2025/11/26

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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**END OF DATA SHEET**